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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1.   (Previously Presented) A method of deconstructing video comprising:

separating a video image sequence into two or more components;

selecting a plurality of dimensions, where each dimension represents a characteristic of the video image sequence; and

encoding each component of the video image sequence in accordance with the selected dimensions to form a plurality of bitstreams, such that the plurality of bitstreams forms a partial order wherein each point of the partial order represents a unique valid combination of components and dimensions for encoding the video image sequence, and a base of the partial order represents a base bitstream comprising components that are common to each of said plurality of bitstreams.

2.   (Previously Presented) The method of claim 1 wherein said encoding step comprises:

forming the base bitstream representing a first video image sequence having a first set of characteristics; and

forming at least one additional bitstream, where each additional bitstream represents a different dimension and wherein when said base bitstream and said at least one additional bitstream are combined to form a combined bitstream, the combined bitstream represents a reconstructed video image sequence having different characteristics than said first video image sequence.

3.   (Previously Presented) The method of claim 1 wherein said plurality of dimensions comprise at least one of specific image regions, frame rate, resolution, and color depth.

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4.   (Cancelled)

5.   (Previously Presented) The method of claim 1 wherein each of said two or more components is encoded as at least one additional bitstream.

6.   (Previously Presented) The method of claim 1 wherein all of said two or more components are orthogonal relative to each other.

7.   (Original) The method of claim 1 wherein said method is performed at the edge of a network.

8.   (Original) The method of claim 1 wherein said method is performed at an intermediate node within a network.

9.   (Original) The method of claim 8 wherein an intermediate node performs one or more functions selected from reconstruction, deconstruction, or a combination of deconstruction and reconstruction.

10.   (Cancelled)

11.   (Previously Presented) The method of claim 1 wherein, after encoding, each of said two or more components is represented by a base bitstream and at least one additional bitstream.

12.   (Cancelled)

13.   (Cancelled)

14.   (Previously Presented) The method of claim 11 wherein said base bitstream

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represents a first video image sequence having minimal quality.

15.   (Previously Presented)   The method of claim 14 wherein said at least one additional bitstream, when combined with said base bitstream, represents a second video image sequence having a quality that is higher than said base bitstream.

16.   (Withdrawn)   A method of distributing deconstructed video through a network comprising a plurality of nodes, the deconstructed video comprising a base bitstream and a plurality of additional bitstreams that, when taken together, represent a video sequence, the method comprising:

selecting within a node said base bitstream and at least one of said additional bitstreams, wherein said selection is performed in response to a capability of a user device that is coupled to said node;

combining said base bitstream and said at least one additional bitstream to form a combined bitstream; and

propagating said combined bitstream to the user device.

17.   (Withdrawn)   The method of claim 16 wherein said selecting step is performed in an intermediate node within the network and said combining step is performed in an edge node.

18.   (Withdrawn)   The method of claim 16 wherein said selecting step is performed at the edge of a network.

19.   (Withdrawn)   The method of claim 16 wherein the manner of distribution of said deconstructed video through the network is selected from the following group: broadcast, pointcast, multicast.

20.   (Withdrawn)   The method of claim 16 wherein said at least one additional bitstream represents a dimension of said video sequence.

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21. (Withdrawn) The method of claim 16 wherein said base bitstream represents a video sequence having minimal quality.

22. (Withdrawn) The method of claim 21 wherein said at least one additional bitstream, when combined with said base bitstream, represents a video sequence having a quality that is higher than said base bitstream.

23. (Withdrawn) The method of claim 16, wherein the network comprises at least one transition node, where each transition node performs a method comprising:

selecting said base bitstream and at least one of said additional bitstreams for further propagation through a network that is coupled to said at least one transition node.

24. (Withdrawn) The method of claim 23 wherein said further propagation is through a second network comprising nodes that perform a method comprising:

selecting said base bitstream and at least one of said additional bitstreams, wherein said selection is performed in response to a capability of a user device that is coupled to said node in said second network;

combining said base bitstream and said at least one additional bitstream to form a combined bitstream; and

propagating said combined bitstream to the user device.

25. (Previously Presented) Apparatus for producing deconstructed video comprising:

a video component extractor for extracting at least one second image sequence from a first image sequence, where said at least one second image sequence represents a component of said first video image sequence;

an encoding dimension selector for selecting a plurality of dimensions to use to encode said at least one second image sequence; and

a dimension-based encoder, coupled to said encoding dimension selector, for

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encoding the at least one second video image sequence into a plurality of bitstreams, such that the plurality of bitstreams forms a partial order wherein each point of the partial order represents a unique valid combination of dimensions for encoding the first image sequence and the at least one second image sequence, and a base of the partial order represents a base bitstream comprising components that are common to each of said plurality of bitstreams.

26.   (Original) The apparatus of claim 25 wherein the dimensions are orthogonal.

27.   (Original)   The apparatus of claim 25 wherein the components comprise foreground, background, and moving objects.

28.   (Original)   The apparatus of claim 25 wherein the dimensions comprise resolution, frame rate, and color.

29.   (Withdrawn)   A system for generating and distributing deconstructed video comprising:
         a deconstructed video source for producing a plurality of bitstreams that represent a video sequence;
         a communications network, coupled to said deconstructed video source, for propagating said plurality of bitstreams; and
         a plurality of network interface devices (NIDs), coupled to said network, for extracting a subset of the plurality of bitstreams and propagating said subset of bitstreams to a user device.

30.   (Withdrawn) The system of claim 29 further comprising transition nodes, coupled to said network, for extracting a subset of said plurality of bitstreams from said network and coupling the subset of bitstreams to a second network.

31.   (Withdrawn) The system of claim 30 further comprising NIDs coupled to said

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second network for extracting a further subset of the subset of bitstreams and coupling the further subset of bitstreams to a user device.

32.   (Previously Presented) A computer readable medium containing software that, when executed by one or more general purpose computers operating as network nodes, causes the computer or computers to perform a method comprising:

separating a video image sequence into two or more components;

selecting a plurality of dimensions, where each dimension represents a characteristic of the video image sequence; and

encoding each component of the video image sequence in accordance with the selected dimensions to form a plurality of bitstreams, such that the plurality of bitstreams forms a partial order wherein each point of the partial order represents a unique valid combination of components and dimensions for encoding the video image sequence, and a base of the partial order represents a base bitstream comprising components that are common to each of said plurality of bitstreams.

33.   (Previously Presented) The method of claim 32 wherein said encoding step comprises:

forming the base bitstream representing a first video image sequence having a first set of characteristics; and

forming at least one additional bitstream, where each additional bitstream represents a different dimension and wherein when said base bitstream and said at least one additional bitstream are combined to form a combined bitstream, the combined bitstream represents a reconstructed video image sequence having different characteristics than said first video image sequence.

34.   (Previously Presented) The method of claim 32 wherein said plurality of dimensions comprise at least one of specific image regions, frame rate, resolution, and color depth.

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35.   (Cancelled)

36.   (Previously Presented)   The method of claim 32 wherein each of said components is encoded as at least one additional bitstream.

37.   (Previously Presented) The method of claim 32 wherein all of said two or more components are orthogonal relative to each other.

38.   (Original) The method of claim 32 wherein said method is performed at the edge of a network.

39.   (Cancelled).

40.   (Previously Presented) The method of claim 32 wherein, after encoding, each of said two or more constituent components is represented by a base bitstream and at least one additional bitstream.

41.   (Cancelled).

42.   (Cancelled).

43.   (Previously Presented) The method of claim 40, wherein said at least one additional bitstream represents a dimension of said video image sequence.

44.   (Previously Presented) The method of claim 33 wherein said base bitstream represents a first video image sequence having minimal quality.

45.   (Previously Presented) The method of claim 44 wherein said at least one additional bitstream, when combined with said base bitstream, represents a second video image sequence having a quality that is higher than said base bitstream.

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